

WHAT IS CLAIMED IS:

1. A CDMA transmitter comprising:

spreading means for employing a spreading code
allocated for a self-channel to spread a transmission signal,
5 for which a time slot having a predetermined cycle and having
a different timing from that of a different channel is
allocated to a synchronization time slot for the self-channel,
and which is synchronized with a transmission signal for the
different channel and for outputting a spreading signal; and
10 power control means for increasing, until greater
than an amplitude for a spreading signal for the different
period, an amplitude for a period for the synchronization
time slot of the self-channel that is included in the
spreading signal, and for outputting the resultant signal as
15 a modulation signal.

2. A CDMA transmitter according to claim 1, further
comprising:

no signal power setting means for performing a no
signal power setting for the period for the synchronization
20 time slot of the different channel that is included in the
modulation signal,

wherein a sync bit is inserted into the
synchronization time slot.

3. A CDMA transmitter according to claim 2, wherein
25 the power control means also serves as the no signal power
setting means, and wherein to perform a no signal power
setting, the power control means halts the signal input or

the signal output during the period for the synchronization time slot of the different channel.

4. A CDMA transmitter according to claim 2, wherein the spreading means also serves as the no signal power setting means, and wherein, to perform the no signal power setting, the spreading means halts the spreading during the period of the synchronization time slot for the different channel.

5. A CDMA multiplex transmitter comprising:
a plurality of CDMA transmitters according to claim 1; and

multiplexing means for superimposing modulation signals received from the CDMA transmitters.

6. A CDMA multiplex transmitter according to claim 5, further comprising:

frame processing means for forming normal signals for synchronization time slots, which are to be transmitted to the CDMA transmitters.

7. A CDMA multiplex transmitter according to claim 6, wherein the frame processing means adds a sync bit to a transmission signal for each channel, and forms a signal to be transmitted to each of the CDMA transmitters.

8. A CDMA receiver comprising:
correlation means for obtaining a correlation between a multiplex signal received from a CDMA multiplex transmitter according to claim 5, and a spreading code allocated to a self-channel, and for outputting a correlation

signal;

synchronization timing detection means for, upon the reception of the correlation signal from the correlation means, identifying a large positive and/or negative
5 correlation value portion included in a synchronization time slot for the self-channel;

clock regeneration means for employing the output of the synchronization timing detection means to produce a regenerated clock having a time slot cycle; and

10 gate means for sampling, in accordance with the regenerated clock, the correlation signal or a signal obtained by wave-shaping the correlation signal, and for reproducing a transmission signal.

9. A CDMA receiver according to claim 8, further
15 comprising:

frame removal means for removing a sync bit from an output signal of the gate means.

10. A CDMA communication system comprising:
a plurality of CDMA transmitters according to claim
20 1; and

a plurality of CDMA receivers according to claim 8.

11. A CDMA communication system comprising:
a CDMA multiplex transmitter according to claim 5;
and
25 a plurality of CDMA receivers according to claim 8.